University of Karachi, Karachi, Pakistan; Pd = Sri Lanka Botanic Garden, Peradeniya, Sri Lanka; Rm = Andrew R. Moldenke Herbarium, Santa Cruz, California; Ub = Universidade de Brasília, Brasília, Brazil; Uc = University of Calicut, Calicut, Kerala, India; Zu = Botanischer Garten und Institut für Systematische Botanik der Universität, Zürich, Switzerland.

## NOTES ON NEW AND NOTEWORTHY PLANTS. LXX

## Harold N. Moldenke

ERIOCAULON QUINQUANGULARE var. ELATIUS Moldenke, var. nov. Haec varietas a forma typica speciei foliis omnino rubris usque ad 15 cm. longis et pedunculis usque ad 40 cm. longis recedit.

This variety differs from the typical form of the species in having its leaves and sheaths entirely bright red both when fresh and when dried, the leaves to 15 cm. long, and the flowering peduncles to 40 cm. long.

The type of the variety was collected by Harold Norman Moldenke, Alma Lance Moldenke, Don Bhathiya Sumithraarachchi, and Sheldon Waas (no. 28319), growing abundantly with Kyris sp. in a rice paddy field at milepost 4/4 on the road from Mirigama to Divulapitiya, Davatagahawatta, Negombo, Colombo District, Western Province, Sri Lanka, on February 3, 1974, and is deposited in my personal herbarium at Plainfield, New Jersey. The plant is reminiscent of E. quinquangulare var. martiamum Wall. and E. roseum Fyson, but does not have the proliferating flower-heads nor elongated bractlets.

PAEPALANTHUS SPECIOSUS var. ATTENUATUS Moldenke, var. nov. Haec varietas a forma typica speciei foliis caulinis usque ad apicem longiter gradatimque attenuatis saepe plusminus arcuatis recedit.

This variety differs from the typical form of the species in having its stem-leaves gradually long-attenuate to the apex and often more or less arcuate-recurved.

The type of this variety was collected by Howard Samuel Irwin, Raymond M. Harley, and Gary Lane Smith (no. 32935) in the cerrado in an area of campo and cerrado on outcrops about 22 km. north of Alto do Paraíso, at an altitude of about 1250 m., in the Chapada dos Veadeiros, on the Planalto do Brasil, Goiás, Brazil, on March 22, 1971, and is deposited in my personal herbarium at Plainfield, New Jersey. The collectors describe the plant as having stems to 2 meters tall and white flower-heads.

PAEPALANTHUS SPECIOSUS var. BOLIVIANUS Moldenke, var. nov.

Haec varietas a forma typica speciei bracteis involucrantibus stramineo-brunneis nec nigris recedit.

This variety differs from the typical form of the species in having its involucral bracts stramineous-brownish rather than black.

The type of the variety was collected by Carl Ernst Otto Kuntze at 200 meters altitude near Velasco, Santa Cruz, Bolivia, in July, 1892, and is deposited in the Britton Herbarium at the New York Botanical Garden.

PAEPALANTHUS SPECIOSUS f. CALVESCENS Moldenke, f. nov.

Haec forma a forma typica speciei solum foliis caulinis glabris

vel glabrescentibus recedit.

This form differs from the typical form of the species only in having its stem-leaves completely glabrous or glabrescent at time of anthesis, but being elongate-ascending as in the typical form.

The type of the form was collected by Hugh Algernon Weddell (no. 2133) somewhere in Goiás, Brazil, in November or December, 1844, and is deposited in the Britton Herbarium at the New York Botanical Garden.

STACHYTARPHETA ANGUSTIFOLIA f. JENMANI (Moldenke) Moldenke, comb. & stat. nov.

Stachytarpheta elatior var. jenmani Moldenke, Phytologia 1: h72. 19h0.

STACHYTARPHETA CHAMISSONIS var. ANDERSONII Moldenke, var. nov. Haec varietas a forma typica speciei recedit floribus pedicellatis, racemis brevioribus, foliis obovato-spathulatis, et pubescentibus brevissimis.

This variety differs from the typical form of the species in its distinctly pedicellate flowers, often shorter racemes, the leaves obovate-spatulate in shape, and the very short puberulent

pubescence on the stems and branches.

The type of the variety was collected by William Russell Anderson (no. 7893) — in whose honor it is named — in open rocky cerrado traversed by a stream, at about 1000 m. altitude, 4 km. by road east of São João de Alianca, in the Serra Geral do Paraná, Goiás, Brazil, on March 24, 1973, and is deposited in my personal herbarium at Plainfield, New Jersey. The collector describes the plant as a shrub, 1--2 m. tall, with red-orange corollas.

STACHYTARPHETA CHAMISSOMIS var. LONGIPEDICELLATA Moldenke, var.nov. Haec varietas a forma typica speciei floribus longipedicellatis valde recedit.

This variety differs from the typical form of the species in having its flowers conspicuously long-pedicellate.

The type of the variety was collected by William R Anderson (no. 6460) on a rocky hillside in a region of rocky sandstone

hilltop cerrado, seeping hillsides, rocky open cerrado in raised places on hillsides, and open mesophytic woods by a stream, at an altitude of 1600 m., 20 km. by road north of Alto Paraíso, in the Chapada dos Veadeiros, Goiás, Brazil, on March 6, 1973, and is deposited in my personal herbarium at Plainfield, New Jersey. The collector notes that the plant is a shrub, 2 m. tall, with orange-red flowers.

VITEX ALTISSIMA f. juv. ALATA (Willd.) Moldenke, stat. nov.

Vitex alata Willd., Gesell. Naturforsch. Freund. Berlin Neue
Schr. 4: 203. 1803.

Observation in the field by my wife and myself in Sri Lanka this past winter indicates that Willdenow's plant seems to be only the juvenile state of the Sri Lankan glabrous variety of V. altissima. It has been claimed by Trimen (Handb. Fl. Ceyl. 358. 1895) that this form sometimes matures and produced inflorescences with the flowers "more laxly arranged", citing a collection by J. P. Lewis from Mulliativu. He says that "Mr. J. P. Lewis informs me that it has a different habit of growth to the ordinary tree. being taller and straighter. He found a few trees only at Vavaddai and Neduchaddikkulam." He cites V. alata Heyne and V. appendiculata Roth and adopts V. altissima var. alata Trimen as the name. It seems clear, however, that Willdenow's name has priority. My good friend, Magdon Jayasuriya, has kindly examined the Lewis collection in the Peradeniya herbarium and reports that Trimen's statement "leaves with broadly alate petioles" "is not quite true; however the petioles are only slightly winged toward [the] base". This condition is often seen in normal mature trees and so I think the broadly alate form is only a juvenile condition. My good friend, Dr. Edwin A. Menninger, has been growing this species in his Florida nursery and informs me that seedling trees always exhibit the broadly winged petioles. However, when his trees reached flowering age this character was gradually lost. In a letter to me dated November 18, 1957, he says "You will note that the flowering branch has lost most of the winged petiole effect, but this is still retained by the nonflowering branch next to it."

On the many mature trees which my wife and I examined in Sri Lanka we did not find any of the broadly alate petioles, although non-flowering branches usually had the petiole base more conspic-

uously winged.

The broadly alate specimens so often found in herbaria seem, therefore, to represent a juvenile condition reminiscent of the juvenile forms of Eucelyptus and the juvenile forms of Chamacopparis, such as C. obtusa ericoides Boehmer, C. pisifera plumosa (Carr.) Otto, C. pisifera squarrosa (Endl.) Beiss. & Hochst., C. pisifera minima Hornibr., etc., as described by Rehder (Man. Cult. Trees, ed, 2, 59-60. 1940). Whether the juvenile form of this Vitex will ever be propagated as a horticultural subject remains for the future to disclose.